## AMENDMENTS TO THE CLAIMS

1-50. (Cancelled)

51. (New) A method of forming a semiconductor memory device comprising:

forming a metal over a substrate;

patterning said metal into a structure having an outer surface;

blanket depositing a chalcogenide material over said substrate and on said metal structure outer surface;

diffusing a portion of said patterned metal outwardly into a portion of said chalcogenide material.

52. (New) The method of claim 51 wherein said blanket depositing said chalcogenide material comprises chemical vapor deposition.

53. (New) The method of claim 51 wherein said forming said metal comprises blanket deposition.

54. (New) The method of claim 51 wherein said portion of said patterned metal diffused outwardly into said chalcogenide material comprises less than all of said patterned metal.

55. (New) The method of claim 54 wherein the portion of said patterned metal not diffused outwardly into said chalcogenide material is smaller but substantially the same shape as said patterned metal before said portion of said patterned metal is diffused outwardly into said chalcogenide material.

56. (New) The method of claim 51 wherein said portion of said patterned metal diffused outwardly into said chalcogenide material comprises all of said patterned metal.

57. (New) The method of claim 51 wherein the step of diffusing a portion of said patterned metal outwardly into said chalcogenide material comprises irradiating through said chalcogenide material to said patterned metal.

58. (New) The method of claim 57 wherein said irradiating comprises irradiating through said chalcogenide material to said patterned metal with electromagnetic radiation having a wavelength less than 500 nanometers.

59. (New) The method of claim 58 wherein said electromagnetic radiation has a wavelength of about 404 nanometers to about 408 nanometers.

60. (New) The method of claim 58 wherein said electromagnetic radiation has a wavelength of about 405 nanometers.

61. (New) The method of claim 51 further comprising the step of substantially selectively etching the portion of said chalcogenide material into which said patterned metal has not been diffused.

62. (New) The method of claim 61 wherein said etching comprises dry anisotropic etching.

63. (New) The method of claim 61 wherein said etching comprises dry anisotropic etching using a gas chemistry comprising $CF_4$.

64. (New) A method of forming a semiconductor memory device comprising:

forming a patterned metal structure having an outer surface over a substrate;

blanket depositing a chalcogenide material on said patterned metal structure outer surface;

diffusing a portion of said patterned metal outwardly into a portion of said chalcogenide material.

65. (New) The method of claim 64 wherein the step of forming a patterned metal structure having an outer surface comprises the steps of:

forming a metal over a substrate; and

patterning said metal into a structure having an outer surface.

66. (New) The method of claim 64 wherein the step of diffusing a portion of said patterned metal outwardly into said chalcogenide material comprises irradiating through said chalcogenide material to said patterned metal.

67. (New) The method of claim 66 wherein said irradiating comprises irradiating through said chalcogenide material to said patterned metal with electromagnetic radiation having a wavelength less than 500 nanometers.

68. (New) The method of claim 67 wherein said electromagnetic radiation has a wavelength of about 404 nanometers to about 408 nanometers.

69. (New) The method of claim 67 wherein said electromagnetic radiation has a wavelength of about 405 nanometers.

70. (New) The method of claim 64 further comprising the step of substantially selectively etching the portion of said chalcogenide material into which said patterned metal has not been diffused.